# PATENT ABSTRACTS OF JAPAN

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## (54) ALBUM GENERATING PROGRAM AND METHOD

## (57)Abstract:

PROBLEM TO BE SOLVED: To quickly and easily generate an album by automatically sorting a large quantity of image data.

SOLUTION: This program for generating an electric album by sorting the image data attached to a received e-mail comprises a receiving means S21 for receiving the e-mail with the image data attached thereto; a means S26 for analyzing a preset code to determine the place for storing the image data; and a means S29 for extracting the image data from the e-mail and storing the extracted image data in the storage place.



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#### DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention classifies many image data automatically, and relates to the system and program which create an album automatically. [0002]

[Description of the Prior Art] With the spread of digital cameras etc., image data is managed on a computer and the image management software which creates an album electronic by carrying out grouping of the desired image etc. is known.

[0003] This carries out the reduced display (thumbnail) of the image data photoed or read on a computer, many contraction images are displayed on a desired window, and an operator takes up a desired image, looking at these contraction image, and is managing image data by storing in the directory or folder set up beforehand etc. by actuation of drag and drop etc.

[0004] In the construction of a residence moreover, with "the law about promotion of quality reservation of a residence etc." (enforcement in April, Heisei 12) A duty of the flaw warranty for ten years is imposed about a part for the basic structured division. Again Dwelling performance certification mark system is also performed, the construction situation is saved by the photograph, the image of a digital camera, etc. for every process about the difficult part of check etc. after completion of a foundation, a main part, etc., and there are some which are used for a guarantee of quality.

[Problem(s) to be Solved by the Invention] however -- although just generation of a thumbnail is automatically performed by the computer by the image management software of the conventional example of the above-mentioned former -- selection of image data, and classification -- human being's handicraft -- not carrying out -- it does not obtain, but when image data becomes extensive, there is a problem that an effort becomes excessive.

[0006] moreover, in the case where save a construction process by image data and it uses for QA etc. as shown in the conventional example of the above-mentioned latter Many photography persons in connection with housing construction construction of one building exist, and further the principal contractor construction company which generalizes construction of this residence Since it is always dealing with many housings, when each photography person photos a construction situation and sends to a principal contractor construction company, the image data for every process will be sent to a principal contractor construction company in large quantities from each photography person about many housings. For this reason, at the principal contractor construction company which gathers image data, since image data is sent for every construction process of each residence, it will become huge, these huge numbers of image data is classified, the activity album-ized for every housing is needed, and the number of image data has the problem of needing a great effort.

[0007] Then, this invention was made in view of the above-mentioned trouble, classifies a lot of image data automatically, and aims at creating an album quickly and easily.
[0008]

[Means for Solving the Problem] A receiving means for the 1st invention to be a program which classifies the image data attached to the received electronic mail, and generates an electronic album, and to receive the electronic mail with which image data was attached, A storing location analysis means to decide on the location which analyzes the code (structuring code) or text (character string) set up beforehand, and stores said image data from said electronic mail, A storing means to store the image data which extracted image data from said electronic mail, and was extracted to said storing location is operated as a computer.

[0009] Moreover, the 2nd invention is a program which classifies the image data attached to the received electronic mail, and generates an electronic album. An electronic mail generation means to generate the electronic mail which attached the code (structuring code) or text set up beforehand, A transmitting means to transmit this electronic mail to the photography place of an image, and a receiving means to receive the electronic mail with which image data was attached and was answered, A storing location analysis means to decide on the location which analyzes the code or text set up beforehand and stores said image data from said electronic mail, and a storing means to store the image data which extracted image data from said electronic mail, and was extracted to said storing location are operated as a computer.

[0010] Said code is a program according to claim 1 or 2 characterized by showing the attribute of the photoed image data.

[0011] Moreover, including a open means to exhibit the 3rd invention as an electronic album by the Web page which set up beforehand the image data which stored said storing means in said 1st or 2nd invention, this open means is based on the storing location of the stored image data, and generates or updates the link of said Web page.

[0012] Moreover, the 4th invention shows the attribute of the image data which photoed said code in said 1st or 2nd invention.

[0013] In addition, as for said code, in the case of the database with which said code specifies the hierarchy in the storing location equipped with hierarchical structure, for example, or a storing location pinpoints a storing location based on a key, the key of image data is shown.

[0014] Moreover, the processing which receives the electronic mail with which the 5th invention is an album generation method which classifies the image data attached to the received electronic mail, and generates an electronic album, and image data was attached, The processing which decides on the location which analyzes the code (structuring code) or text set up beforehand, and stores said image data from said electronic mail, and the processing which stores the image data which extracted image data from said electronic mail, and was extracted to said storing location are included.

[0015] Moreover, the processing which generates the electronic mail which attached the code (structuring code) or text which the 6th invention is an album generation method which classifies the image data attached to the received electronic mail, and generates an electronic album, and was set up beforehand, The processing which transmits this electronic mail to the photography place of an image, and the processing which receives the electronic mail with which image data was attached and was answered, The processing which decides on the location which analyzes the code or text set up beforehand and stores said image data from said electronic mail, and the processing which stores the image data which extracted image data from said electronic mail, and was extracted to said storing location are included.

[0016] Moreover, including the open processing to which the processing which stores said image data opens the 7th invention in said 5th or 6th invention as an album electronic at the Web page which set up said stored image data beforehand, this open processing is due to the storing location of the stored image data, and generates or updates the link of said Web page.

[0017]

[Effect of the Invention] Therefore, while requesting photography by E-mail, after according to this invention embedding the code or text (character string) for classifying image data at this electronic mail and completing photography, image data is attached to the electronic mail of a photography request, and it is answered. And since a code or a text is analyzed, and the storing place of the attached image data

can be determined quickly and can be stored out of the received electronic mail, Even if it is the case where a huge number of image data has been sent from two or more photography persons By it being storable in real time in a predetermined storing place, and the stored image data becoming possible [opening to the public as an electronic album on a Web page immediately], and using mostly, an electronic mail, the code set up beforehand, or a text further Conventionally, the image data 20 which had to be performed by handicraft is worked quickly and automatically, and it becomes possible to open to the public immediately as an electronic album.

[Embodiment of the Invention] Hereafter, 1 operation gestalt of this invention is explained based on an accompanying drawing.

[0019] <u>Drawing 1</u> is the conceptual diagram showing an example which manages the construction situation of a detached house by image data.

[0020] The album management site 1 connected to the <outline of hardware> Internet 10 The Web (World Wide Web) server 2 and the mail server 3 which mounted transmitting protocols, such as SMTP, and receiving protocols, such as POP3 (or APOP), A subject constitutes the application server 4 which performs image management application 41 mentioned later, and the database 50 which accumulates the user information on the album management site 1 etc. in each construction photography person's mail address, the image data for every housing, and the information list for every housing.

[0021] The image management application 41 exhibits image data as an electronic album through Web server 2 while it classifies image data and manages the image data attached to the received electronic mail while having the transceiver function (mail client) of an electronic mail for every construction of each housing. In addition, it may distribute to two or more hardware (computer), and these servers may work it, and may work on single hardware.

[0022] On the other hand, the Internet 10 is accessed, and as a client which receives service of the album management site 1, while attaching image data 20 to an electronic mail 30 and transmitting, it consists of computer 5 grades equipped with the transceiver software (mail client) which receives an electronic mail.

[0023] The image data 20 which a digital camera 9 and connection were possible and was photoed with the digital camera 9 is read, and it stores as a file on a store, and this image data 20 is attached to an electronic mail 30, and it transmits to the mail server 3 of the album management site 1, and this computer 5 receives the electronic mail 30 from mail server 3 grade, and consists of on a display possible [a display].

[0024] Moreover, a computer 5 is equipped with the browser (perusal software) which can interpret a HTML (Hyper Text Markup Language) file etc., and is constituted possible [perusal of the image data which the image management application 41 offers through Web server 2].

[0025] In addition, it is not what is limited to the above-mentioned computer 5 and a digital camera 9 as a means to acquire a means to transmit the electronic mail 30 which attached image data, and the information from Web server 2. In <u>drawing 1</u> For example, the cellular phone 6 which can access the Internet (mobile means of communications), The combination of the mobile computing devices of the PDA(Personal Data Assistant) 7 grade equipped with the mail client is sufficient. Or it can constitute from a cellular phone 8 with a camera equipped with the digital camera and the mail client, and digital camera 19 grade equipped with the transceiver function of an electronic mail. In addition, since the communication link with Web server 2 will be attained if PDA7 and the cellular phone 8 with a camera are equipped with a browser, it is more desirable.

[0026] < The outline of software>, next the outline of the album management site 1 are explained. [0027] To the album management site 1, the electronic mail 30 which indicated the photography part and the reply structuring code (after-mentioned) of the housing under construction which were set up beforehand is transmitted to the mail address of the construction photography person by whom the image management application 41 was registered beforehand through a mail server 3.

[0028] According to the received electronic mail 30, a construction photography person etc. photos the housing under construction in digital camera 9 grade, attaches this image data 20 to an electronic mail

- 30 from the album management site 1, and answers a letter.
- [0029] The mail server 3 which received the electronic mail 30 from a construction photography person notifies an electronic mail 30 to the image management application 41.
- [0030] The image management application 41 which received the reply which attached image data 20 analyzes the structuring code indicated by the electronic mail 30, decides on the storing location of image data 20, and stores in a database 50, a storage means, etc. the image data 20 extracted from the electronic mail 30.
- [0031] And after the image management application 41 saves image data 20, it updates or generates the Web page of Web server 2 which exhibits this image data 20 as an electronic album, generates or updates a link with the storing location of the above-mentioned image data 20, and exhibits the image data 20 of a construction situation as an electronic album.
- [0032] <the example of use of an album management site> -- an example of the above use gestalten of the album management site 1 is shown in <u>drawing 2</u>.
- [0033] In <u>drawing 2</u>, principal contractor construction company 5A creates and updates production control data while performing creation of housing data, and updating.
- [0034] And principal contractor construction company 5A registers name and mail address of the photography person who requests actual construction, and assigns a construction photography person for every construction of each housing. Moreover, the electronic album generated with the image management application 41 is perused, and the progress situation of construction is supervised. [0035] Based on the electronic mail 30 from the album management site 1, construction photography person 5B attaches the image data 20 which photoed and photoed the construction situation to an electronic mail 30, and answers a letter. This construction photography person 5B can also peruse the
- electronic mail 30, and answers a letter. This construction photography person 5B can also peruse the electronic album generated with the image management application 41, and can check it about the last process of the construction which he performs etc.

  [0036] Construction supervisor 5C receives a request from a principal contractor construction company
- or a construction photography person, performs command of a construction site, and management, is perusing an electronic album and can check the progress situation of each construction through the Internet 10.
- [0037] Moreover, it is those who inspector 5D belongs to a predetermined inspection institute, and inspect a building affair, and the construction situation of each housing and the progress situation of a process can be grasped by perusing an electronic album through the Internet 10.
- [0038] And chief mourner 5E is those who requested the construction of a housing to the principal contractor construction company etc., and the construction situation of a self housing and the progress situation of a process can be grasped by perusing an electronic album through the Internet 10.
- [0039] The detail of <generation of an electronic mail and transmission>, next the album management site 1 is explained.
- [0040] <u>Drawing 3</u> is the image of the management screen which performs e-mail transmission in the housing registration and the photography person quota list which principal contractor construction company 5A mainly uses.
- [0041] After principal contractor construction company 5A shown in drawing 2 connects with Web server 2 of the album management site 1 and attests with predetermined ID and a predetermined password using a computer, it performs an input from the management screen shown in drawing 3, and sets up those (photography person) who request photography of image data 20 for every housing. [0042] On the management screen of drawing 3, housing and construction / photography person is inputted or updated, respectively, and a photography person is associated about each construction for every housing. By the case where it applies to a building affair like this operation gestalt, a construction photography person shall perform this photography person.
- [0043] The result of this input is transmitted to the image management application 41 from Web server 2, and, as for the image management application 41, the creation and updating of the new record of a database 50 are performed.
- [0044] First, in the management screen of drawing 3, after inputting into the name 101 of the housing

(single-family house) which builds, the chief mourner name 102, the address 103, and each input column of the opening day 104 of construction, the image management application 41 registers a new housing into a database 50 by clicking the housing registration carbon button 120.

[0045] In order to on the other hand already call a registered housing, a desired housing name is chosen from the housing name pull down menu 110 in the middle of the inside of drawing. In addition, what is necessary is just to click the deletion carbon button 121 about the housing name which became unnecessary, after choosing a desired housing name from the housing name pull down menu 110 (or ENTER).

[0046] Next, in order to assign a photography person about each construction of the housing chosen or registered, the construction name pull down menu 105 is operated, and a desired construction name is chosen.

[0047] If the quota carbon button 123 is clicked after operating the photography person name pull down menu 106 after choosing a construction name, and displaying a desired photography person, contracting the photography (reply of image data 20) about the construction which the selected photography person chose with the construction name pull down menu 105 will be set up.

[0048] In addition, a photography person's name and e-mail address are beforehand registered in each registration screen which <u>drawing 3</u> showed caudad, and a photography person's (photography person) name and e-mail address are automatically stored on a database 50.

[0049] If the reading carbon button 124 of the method of drawing Nakashita is clicked after choosing a photography person name, a photography person's selected e-mail address will be displayed on the address column 107 under the photography person name pull down menu 106. When correcting this e-mail address, after inputting a character string into the address column 107, by clicking the downward updating carbon button 125, a photography person's selected e-mail address is updated, and is stored in a database 50.

[0050] By choosing a photography person name, assigning the above-mentioned input for every construction, and clicking a carbon button 123, the photography person who constructs for every construction is set up. In addition, two or more photography persons can be assigned to one construction (process), a photography person can be chosen as it from the sequential photography person name pull down menu 106 to the selected construction name, and two or more photography persons can be set to it to one construction by clicking the quota carbon button 123.

[0051] Next, in order to refer to all the photography person names assigned to each construction, by clicking the quota list carbon button 122, on the right-hand side of <u>drawing 3</u>, a construction name, a photography person name, and an e-mail address are displayed in a subwindow 70, and the selection column 131 which chooses the photography person (those who request photography) who sends an electronic mail is further displayed corresponding to each construction name.

[0052] If a photography person is set up about construction of a housing, image management application will be predetermined timing and the electronic mail 30 which attached a structuring code which is mentioned later, and a concrete photography part and a photography guide will be transmitted to the selected photography person. In addition, if it is set up beforehand and the image data 20 of a foundation is sent when the image data 20 of a last process is answered, the transmit timing of an electronic mail 30 which requests photography transmits an electronic mail 30 to the photography person related with the next skeleton work automatically, and when the image data 20 of skeleton work is answered, it will transmit an electronic mail 30 to the photography person of the following roofing work automatically similarly.

[0053] Moreover, when a photography person besides the automatic above processings deletes accidentally [electronic mail 30], it can have transmitting (distribution) processing of an electronic mail 30, and it can also be manually transmitted from the management screen of <u>drawing 3</u>.

[0054] for example, in case photography directions of a construction situation are sent to the Yamada construction company which constructs the foundation in drawing manually After clicking the selection column 131 on the left-hand side of a subwindow 70 and displaying the selection mark of the black dot mark, by clicking the transmitting carbon button 133 of the subwindow 70 upper part The electronic

mail which attached the structuring code used with the image management application 41, and a concrete photography part and a photography guide is transmitted to the selected photography person so that it may mention later.

[0055] Next, correlation of the photography part and photography guide to each construction is beforehand set up for every construction according to above-mentioned "law about promotion of quality reservation of a residence etc." etc., and these photography part and a guide are attached to the electronic mail 30 to the photography person related with construction.

[0056] <the structure of transmit data> -- every principal contractor construction companies of these and the data for every housing are stored like <u>drawing 4</u> on a database 50.

[0057] In drawing 4, principal contractor construction company data 90' is the user of the album management site 1, and two or more principal contractor construction companies are related with a name and principal contractor code 90A (for example, code of 4 figures), and it is stored in the database 50. [0058] Housing data 110' is related with above-mentioned principal contractor construction company data 90', and two or more housing data 110' is usually associated to one principal contractor construction company data 90'. A name and housing code 110A (code of 4 figures) are associated, and this housing data 110' is stored in the database 50.

[0059] Next, construction data 105' is 01 and 02, respectively to construction names, such as a foundation, skeleton work, a roofing work, outer wall construction, exterior work, and sash construction, for example, if construction code 105A (code of double figures) is related with the name of two or more processes beforehand set up to one housing, it is stored in the database 50 and it is a common wooden residence...... The code of the 06th grade is attached.

[0060] Next, the photography part data 130 are set up about one construction data 105', respectively, and two or more photography part data 130 are beforehand set up about one construction, and they usually consist of a name of a photography part, and photography part code 130A.

[0061] After setting up this photography part data 130 beforehand about a required construction situation according to above-mentioned "law about promotion of quality reservation of a residence etc." etc. when guaranteeing the quality of a residence, and handing over to a chief mourner, it was set up so that a photograph might be taken, and the photography part data 130 are constituted from the name of a photography part, and photography part code 130A (code of double figures) by the part which cannot be checked.

[0062] For example, the parts which require photography from skeleton work are a "foundation splice", "anchor bolt", a "diagonal brace", "the quality of wood", "ant-protection \*\* preservative treatment", etc., and code 130A is 01 and 02 about these photography part names..... It is beforehand set up like the 08th grade.

[0063] Furthermore, the photography guide 131 which consists of a concrete photography location and notes about photography is set up about one photography part, and this photography guide 131 is stored in a database 50 as text data 131A corresponding to the photography part data 130, and is indicated or attached to the electronic mail mentioned later.

[0064] This photography guide 131 consists of following texts, when a foundation splice is chosen as photography part data 130.

[0065] a [photography location] --: -- expansion [photography notes]: of the splice section and a foundation -- the photography guide 130 of \*\*\*\*\* is stored in the database 50 as text data 131A so that a splice may be known clearly.

[0066] In addition, in <u>drawing 4</u>, the photography guide 131 which consists of a concrete photography location and notes about photography like the above about other photography part data 130, such as anchor bolt and a diagonal brace, is beforehand set up as text data 131A.

[0067] Next, the photography person data 140 which construct as <u>drawing 5</u> other than the photography part data 130 shows are related with above-mentioned construction data 105', and correlation of two or more photography person data 140 is possible to one construction data 105'.

[0068] Furthermore, the e-mail address 150 is related with each photography person data 140, and it is stored in the database 50 as address-data 150A.

- [0069] <The message distribution processing of a photography request electronic mail>, next the message distribution processing of the electronic mail which requests photography to the photography person of construction are explained below, referring to the flow chart of <u>drawing 6</u>. In addition, the image management application 41 performs this processing.
- [0070] Message distribution processing of an electronic mail is automatically performed to predetermined timing as mentioned above to the photography person corresponding to the housing and construction which were set up on the management screen shown in <u>drawing 3</u>.
- [0071] <u>Drawing 6</u> shows an example of the processing which distributes an electronic mail about a certain construction of the housing used as transmit timing.
- [0072] First, a database 50 is searched with step S1 of <u>drawing 6</u> about construction of the housing which takes a photograph, and while reading the name of a principal contractor construction company and principal contractor code 90A, housing name and housing code 110A, and name and construction code 105A corresponding to the selected construction, at step S2, a photography person's name and e-mail address 150 which were chosen by above-mentioned <u>drawing 3</u> are read.
- [0073] And at step S3, in order to read the photography part data 130 based on construction code 105A read at the above-mentioned step S1, the initial value beforehand set up as location code 130A is set up. In addition, "01" is set up as initial value of location code 130A here.
- [0074] In step S4, in order to classify image data for every photography part, a structuring code is generated.
- [0075] As drawing 4 shows, this structuring code 200 combines and generates construction code 105A and location code 130A to the above-mentioned principal contractor code 90A and housing code 110A, and, in the case of principal contractor code =0001, the housing code 110= 0001, construction code =04, and location code =01, is set to structuring code =0001\_0001\_0401. In addition, what is necessary is just to set such a notation as arbitration, although "\_" was inserted between principal contractor code 90A and housing code 110A and between \*\*\*\*\* code 110A and construction code 105A.
- [0076] Next, at step S5, the photography guide 131 (text data 131A) corresponding to current location code 130A is read from a database 50.
- [0077] At step S6, while inserting in the "subject name" of an electronic mail the structuring code 200 which created a new electronic mail and was created by the above-mentioned step S4, a photography person name and a housing name are inserted in the head of the text, and a construction name, text data 131A of a photography guide, and the message set up beforehand are inserted further. And a transmitting person name (for example, principal contractor construction company name) is inserted in the text.
- [0078] As shown in <u>drawing 7</u>, a title is used as the structuring code 200 and the electronic mail 30 which requests the reply of the image data which photoed the location specified as the photography person 140 by photography part data about construction name 105of housing name 110" with the digital camera etc. on the requirements specified in the photography guide 131 is created by processing of the above-mentioned step S4 step S7.
- [0079] Next, the image management application 41 transmits this electronic mail to a mail server 3 at step S7, and a mail server 3 transmits it to the specified mail address 150.
- [0080] In this way, if an electronic mail is transmitted about one photography part among the selected construction, the increment (1 is added) of the location code will be carried out, and the photography guide 131 corresponding to the following location code will be searched with step S8.
- [0081] In step S9, if the existence of the next photography part is judged and there is a photography part about corresponding construction code 105A, it will return to step S4, an electronic mail is transmitted about the next photography part, and about the photography part corresponding to a construction code, after transmitting an electronic mail, respectively, processing is ended.
- [0082] The electronic mail which indicated the main point of a photography part required to satisfy predetermined requirements (the above-mentioned law etc.) and photography about construction of the selected housing by the above-mentioned message distribution processing is generated for every photography part, and is transmitted automatically.

[0083] The photography person who received two or more electronic mails shown in <u>drawing 8</u> takes a photograph with a digital camera etc. for every photography part, attaches the photoed image to an electronic mail, and answers the album management site 1.

[0084] Since what is necessary is just to work along with a location and notes while a photography person looks at an electronic mail (or printed matter of an electronic mail) in photography, a photograph can be efficiently taken by losing seeing data each time or asking a principal contractor construction company.

[0085] In this way, as <u>drawing 8</u> shows, the photoed image data 20 considers as the attached file of the reply mail 31, and is transmitted to the address 151 (= mail server 3) of a transmitting agency.

[0086] The <reception of reply mail> image management application 41 always reads reception mail of a mail server 3 in the background, receives the reply mail 31 from a photography person, determines the storing place of the image data 20 attached based on the structuring code 200, and stores it in a storage means with the gestalt which can be exhibited by the website.

[0087] It explains in full detail, referring to the flow chart of <u>drawing 9</u> about the reception which the image management application 41 performs.

[0088] First, at step S21, the reply mail 31 which has reached the mail server 3 is read, next at step S22, it judges whether an attached file is in the read reply mail 31, and when there is no attached file, while judging with processing needlessness and ending processing, when there is an attached file, it progresses to step S23.

[0089] A character string is scanned from the position of the reply mail 31, and principal contractor code 90A is searched with step S23. For example, the subject name column of the reply mail 31 shown in drawing 9 is scanned, and the subject name column is "Re. The case where it is :0001#0001#0401", "Re: Four characters are extracted from or subsequent ones", "0001" is set to principal contractor code of 4 figures 90A, and it changes into a code from text data.

[0090] Similarly, at step S24, scan the subject name column of the reply mail 31 succeedingly, and four characters are extracted from the first "#." It changes into "0001" housing code 110A, and further, at step S25, two characters are extracted from the following "#" or subsequent ones, "04" is changed as construction code 105A, by step S26, the two next characters are extracted and "01" is changed as photography part code 130A.

[0091] At step S27, the storing place of the attached image data 20 is determined from these principal contractor code 90A, housing code 110A, construction code 105A, and photography part code 130A. [0092] And at steps S28 and S29, image data 20 is extracted from the attached file of the reply mail 31, and image data 20 is stored in the storing place determined at step S27.

[0093] For example, what is necessary is to make principal contractor code 90A, housing code 110A, construction code 105A, and photography part code 130A into key field, and just to embed file pass 20' which saved image data 20 so that one record might be constituted with these key fields in the case where image data 20 is stored in a database 50, as <u>drawing 10</u> shows.

[0094] or in the case where it saves as a file As shown in <u>drawing 11</u>, for the storage means 40 of an application server 4 In the low order of the directory 210 corresponding to principal contractor code 90A or a principal contractor construction company name The directory 211 corresponding to housing code 110A or a housing name is formed. The file name 212 including construction code 105A, a construction name and photography part code 130A, or a photography location name is formed in this directory 211, and the image data 20 decoded as mentioned above is stored.

[0095] If the image data 20 which shows the situation of each construction from two or more housings of each principal contractor construction company by the above-mentioned reception is sent by the reply mail 31 The structuring code 200 included in the electronic mail at the time of a photography request from the album management site 1 is analyzed. The storing place of image data 20 can be determined automatically, and it becomes possible to classify to the record of a database 50, or the directory of the storage means 40 automatically, and to store in it. Without requiring a help, a lot of [ quickly ] image data 20 can be classified, and the electronic album can be generated easily.

[0096] <generation and perusal> of an electronic album -- the image data 20 classified automatically as

mentioned above is exhibited as an electronic album on Web page 60, as drawing 12 shows.

[0097] If the image management application 41 stores image data 20, it will perform generation or edit of an electronic album automatically by creating or updating Web page 60 on Web server 2, and creating or updating the links L01-L04 of the image data 20 (image file) stored newly.

[0098] In <u>drawing 12</u>, the case where image data 20 is saved as a file 01 for the storage means 40 of an application server 4 is shown like above-mentioned <u>drawing 11</u>, and the link L01 which shows the file pass of a file 01 is created by Web page 60, and it is opened to it as an electronic album. In addition, the layout of Web page 60 is set up beforehand.

[0099] In this way, an example of the created electronic album is shown in drawing 13.

[0100] On the upper part of this Web page 60, housing name 110' and construction name 105' are displayed by the link of HTML, and the links L01-L15 of the image file of three line x5 train and the link of the photography part 130 corresponding to each image file are established in the bottom of it in it.

[0101] Moreover, a chief mourner is not provided with an unnecessary image etc. by forming the check box 132 which determines whether it indicates to a chief mourner as each image file, and checking this check box 132.

[0102] This Web page 60 can be divided and arranged for every housing (housing name pull down menu 110in drawing'), and every (construction-among drawing name pull down menu 105') construction, can choose a housing name and a construction name from a selection screen as shown in <u>drawing 14</u>, and can peruse a desired album.

[0103] As mentioned above, after requesting photography by E-mail, embedding the structuring code 200 for classifying image data 20 at this electronic mail and completing photography By attaching image data 20 to the electronic mail of a photography request, and answering it, the image management application 41 of the album management site 1 Since the storing place of the image file 20 attached by extracting the structuring code 200 out of an electronic mail can be determined quickly and can be stored, Even if it is the case where a huge number of image data 20 has been sent from two or more photography persons, mostly, it can store in real time at a predetermined storing place, and the stored image data 20 becomes possible [ opening to the public as an electronic album on Web page 60 immediately ] further.

[0104] Thus, by using an electronic mail and the structuring code 200, the classification activity of image data 20 which had to be done by handicraft is done quickly, and it becomes possible conventionally to open to the public immediately as an electronic album.

[0105] Although two or more photography persons at many processes are concerned a case [ it applying to construction work as mentioned above especially ] Only by attaching and answering a letter, the data 20 photoed to the electronic mail which attached the structuring code 200 Classification is performed automatically and record of a construction situation can be generated quickly. Moreover, a principal contractor construction company, an inspector, a chief mourner, etc. The big merit that it can check by using the cellular phone 6 which can access the Internet, without asking a location and time amount about a current progress situation and the contents of construction arises.

[0106] <u>Drawing 15</u> - <u>drawing 17</u> show the 2nd operation gestalt, and transpose the structuring code 200 of said 1st operation gestalt to a text (character string), and other configurations are the same as that of said 1st operation gestalt.

[0107] <u>Drawing 15</u> showed the message distribution processing of the electronic mail which requests photography to the construction photography person of construction, and attached the same sign about the same processing as the flow chart of <u>drawing 6</u> of said 1st operation gestalt.

[0108] Message distribution processing of an electronic mail will be performed, if the relation of the housing which takes a photograph, construction, and a photography person is set up by above-mentioned drawing 3 and becomes predetermined timing like the above like drawing 6 of said 1st operation gestalt.

[0109] The image management application 41 is step S1', and it reads a photography person's name and e-mail address 150 at step S2 while it searches a database 50 about construction of the corresponding

housing and reads the name of a principal contractor construction company, a housing name, and the selected construction name.

- [0110] Next, in step S3', in order to classify image data for every photography part, the first photography part is read from a database 50 among the photography part names corresponding to the construction name chosen by above-mentioned step S1' set up beforehand.
- [0111] Next, at step S5, the photography guide 131 (text data 131A) corresponding to a current photography part is read from a database 50.
- [0112] In step S6', a new electronic mail is created and the principal contractor construction company name read by the above-mentioned step S1'-S3, a housing name, a construction name, and a photography part name are inserted in the position of the electronic mail which carried out [ above-mentioned ] generation as a text for classifying an image behind.
- [0113] In case each name for classifying an image is inserted here As each name is inserted after the subject name set up beforehand, for example, <u>drawing 17</u> shows From the head of the text of an electronic mail 30, like the residence [construction name] foundation [photography place] foundation splice 1 [ of [principal contractor construction company name] ICKT [housing name] A ] A predetermined notation = into [], the subject name (a principal contractor construction company name, a housing name, a construction name, photography part) set up beforehand is inserted, and each name is inserted after these [].
- [0114] In addition, it is a foundation photography request of Housing A etc. that what is necessary is just to insert a predetermined text (or character string) in a housing name and a construction name at the subject name column of an electronic mail 20 at this time.
- [0115] If the predetermined text about the image to photo is inserted in the generated electronic mail, while inserting the read photography guide at step S7 like said 1st operation gestalt, an electronic mail is transmitted after inserting the reply address etc. with a transmitting person.
- [0116] And at step S8', by step S9', the next photography part is read, and if it has judged and sent whether the electronic mail 20 was sent about all the photography parts matched with the construction name, processing will be ended, and when that is not right, it returns to step S5, the electronic mail 20 of the next photography part is generated, and it transmits.
- [0117] The electronic mail which indicated the main point of a photography part required to satisfy predetermined requirements (the above-mentioned law etc.) and photography about construction of the selected housing by the above-mentioned message distribution processing is generated for every photography part, and is transmitted automatically.
- [0118] The photography person who received two or more these electronic mails takes a photograph with a digital camera etc. for every photography part, attaches the photoed image to an electronic mail 30, and answers the album management site 1.
- [0119] The image management application 41 always reads reception mail of a mail server 3 in the background, receives the reply mail 31 from a photography person, determines the storing place of the image data 20 attached by analyzing the text (character string) of the reply mail 31, and stores it in a storage means with the gestalt which can be exhibited by the website.
- [0120] The reception which the image management application 41 performs is explained in full detail, referring to the flow chart of drawing 16.
- [0121] First, the reply mail 31 which has reached the mail server 3 like said 1st operation gestalt at step S21 is read, next at step S22, it judges whether an attached file is in the read reply mail 31, and when there is no attached file, while judging with processing needlessness and ending processing, when there is an attached file, it progresses to step S23'.
- [0122] A character string is scanned for the text of the reply mail 31 from a position, and a principal contractor construction company name is searched with step S23'.
- [0123] Here, the text of the reply mail 31 shown in <u>drawing 17</u> is analyzed from a head, and the character string "ICKT" which appears after a [principal contractor construction company name] is started as a principal contractor construction company name.
- [0124] Similarly, in step S24', the analysis of a character string is continued and the character string "the

residence of A" which appears after a [housing name] is started as a housing name.

[0125] In step S25', the analysis of a character string is continued further and the character string "a foundation" which appears after a [construction name] is started as a construction name.

[0126] In step S26', the analysis of a character string is continued further and the character string "the foundation splice 1" which appears after a [photography part name] is started as a photography part name.

[0127] hereafter, the storing places (name of a directory etc.) of the attached image data 20 are determined from these principal contractor construction company name that carried out end appearance, a housing name, a construction name, and a photography part after step S27.

[0128] And at steps S28 and S29, image data 20 is extracted from the attached file of the reply mail 31, and image data 20 is stored in the storing place determined at step S27.

[0129] In this way, even if it is the case where the text (character string) of a \*\*\*\*\*\*\* sake is directly inserted in an electronic mail 30 for an image, the storing location of image data 20 can be grasped quickly, and the album by image data can be generated automatically.

[0130] In addition, in the above-mentioned operation gestalt, although an example applied to construction work was shown, it is applicable to the activity which specifies a civil work and a progress situation.

[0131] Moreover, after a housing is completed, by recording the generated Web page on CD-R, DVD-R, RW, RAM, etc., and providing to a chief mourner, after completion of a foundation, a main part, etc., the construction situation about the difficult part of check etc. can be specified, and it becomes possible to perform the performance guarantee of flaw security or a residence correctly.

[0132] Moreover, in the above-mentioned operation gestalt, although the example which inserted the structuring code 200 in the subject name column of an electronic mail was shown, it is not limited to this, and you may be among the text and the structuring code 200 should just insert in an identifiable location in the case of reception.

[0133] It should be thought that the gestalt of the operation indicated this time is [no] instantiation at points, and restrictive. The range of this invention is shown by the above-mentioned not explanation but claim, and it is meant that all modification in the range of a claim, equal semantics, and the contents is included.

[Translation done.]